

60. The method of preparing a purified biologically active alpha 1-antitrypsin ( $\alpha$ 1-AT) preparation according to claim 59, further comprising passing said material containing  $\alpha$ 1-AT over an anion exchange material.

61. The method according to claim 59, wherein said eluting step is conducted with a buffer having a pH of between 5.5 and 8.0.

62. The method according to claim 61, wherein said eluting step is conducted with a buffer having a pH of between 6.5 and 6.8.

63. The method according to claim 59, wherein said starting material is plasma or a plasma fraction.

64. The method according to claim 59, wherein said starting material is an albumin-depleted plasma fraction.

65. The method according to claim 59, wherein said starting material is Cohn V precipitate.

66. The method according to claim 64, wherein said starting material is a pre-purified  $\alpha$ 1-AT preparation fraction.

67. The method according to claim 60, wherein said passing is conducted in the presence of a detergent.

68. The method according to claim 59, wherein said hydroxyapatite is a ceramic hydroxyapatite.

69. The method according to claim 59, wherein said eluting is conducted with a buffer which comprises a salt having an ionic strength corresponding to 60 mM of phosphate.

70. The method according to claim 59, wherein said eluting is conducted with a buffer which comprises a salt having an ionic strength corresponding to 40 mM of phosphate.

71. The method according to claim 59, wherein said eluting is conducted with a buffer which comprises a salt having an ionic strength corresponding to 50 to 130 mM of phosphate.

72. The method as set forth in claim 59, further comprising a pathogen inactivation step.

73. The method as set forth in claim 72, wherein said pathogen inactivation step includes at least one of a solvent, a detergent or a heat treatment step. - -